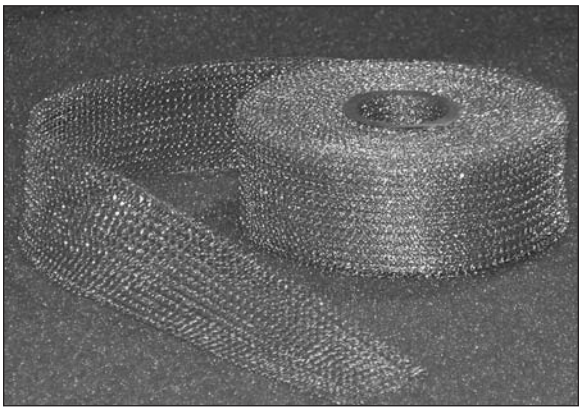
EMI Shielding Tape

THIN STRIP OF WIRE MESH

U.S. Customary
[SI Metric]

GENERAL DESCRIPTION

EMC SHIELDING TAPE is a double layered strip of knitted wire mesh providing effective EMI shielding for electrical and electronic cable assemblies. The knitted construction of EMI SHIELDING TAPE maximizes conformability and flexibility while minimizing bulk and weight. Standard EMC SHIELDING TAPE uses Sn/Cu/Fe knitted wire to provide greater physical strength and shielding effectiveness than may be achieved with other tape materials.



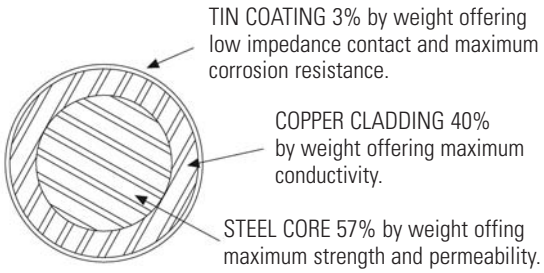


Figure 1. Cross section of Sn/Cu/Fe wire.

APPLICATION INFORMATION

TECKNIT EMC SHIELDING TAPE is recommended for EMI shielding, grounding, and static discharge applications. It is particularly effective as a primary or supplementary shield for electronic cables and cable assemblies. The flexibility of EMC SHIELDING TAPE permits it to conform to irregular surfaces. EMC SHIELDING TAPE is useful in a broad range of temperatures and environments.

EMI SHIELDING PERFORMANCE

TECKNIT EMC SHIELDING TAPE Shielding Effectiveness has been tested in accordance with TECKNIT Test Method TSETS-01 and based upon modified MIL-STD-285. Typical values are given below.

MATERIALS	H-FIELD 100 kHz	E-FIELD 10 MHz	PLANE WAVE 1 GHz	PLANE WAVE 10 GHz
	dB	dB	dB	dB
Sn/Cu/Fe	45	60	40	30

SPECIFICATIONS

MATERIAL DESCRIPTION

Wire Mesh*: Sn/Cu/Fe, (tin coated copper clad steel see Figure 1) .0045 ± .0005 in. [0.114 ± 0.012mm] diameter in accordance with ASTM B-520.

Width: 1.00 in. [25.4 mm] nominal.

Thickness: .02in. [0.45 mm] nominal.

Weight: 8.0 oz. per 100 feet [745 grams per 100 meters].

PERFORMANCE CHARACTERISTICS

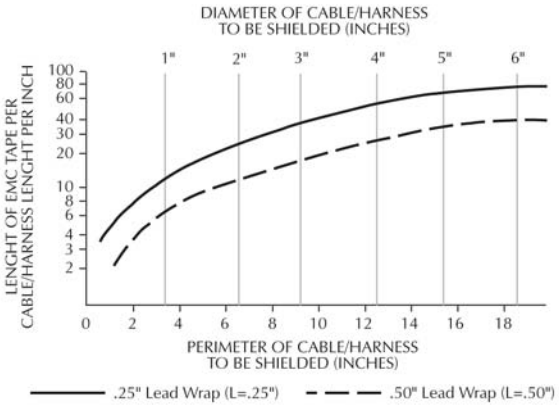
Corrosion Resistance: Excellent.

Solderability: Excellent.

*Special orders available in different widths and in such materials as Monel, Aluminum, Silver Plated Brass, Tin-Plated Phosphor Bronze.

U.S.A.: 908-272-5500 • U.K.: 44-1476-590600 • Spain: 34-91-4810178

TAPE LENGTH VS. CABLE SIZE



Note: For each termination and/or branch connection add 30 in. [76 cm] of EMC tape to anticipated usage.

Figure 2

SHIELDING TAPE TERMINATION

TECKNIT Two Part, Silver-filled, Conductive Epoxy (Part No. 72-08116), is recommended for cable shielding tape termination. The epoxy is rigid with a volume resistivity of 0.001 ohm-cm. EMC SHIELDING TAPE may also be terminated by means of soldering or clamping.

METHODS OF APPLYING EMC SHIELDING TAPE TECKNIT EMC SHIELDING TAPE

should be wrapped around the cable assembly. Wrap the main cable and terminate the tape before beginning to wrap the cable branch. Start and end all helical wrapping with a minimum of two overlapping circumferential wraps. At branch connections, start at least 4 in. [100 mm] before and after branch to assure adequate EMC SHIELDING TAPE coverage at the “V” section. Branch connections should not be designed to occur within 4 in. [100 mm] or each other.

Recommended lead for most applications is 0.50 in. [13 mm], although some additional shielding will be achieved when utilizing a 0.25 in. [6 mm] lead. The length of EMC SHIELDING TAPE required for each cable using these two types of lead wraps can be obtained by referring to Figure 2.

TECKNIT PART NUMBERS	LENGTH OF EMC TAPE
23-50225	25 ft. [7.6 m] per roll
23-50200	100 ft. [30.5 m] per roll
23-50233	1000 ft. [305 m] per spool
23-50231	1500 ft. [457 m] per spool
23-50228	2000 ft. [610 m] per spool
23-50229	2500 ft. [762 m] per spool

WIRE TYPE / WIRE DIAMETER

TECKNIT mesh stockings are available in any of our standard wires:

WIRE TYPE	WIRE DIAMETER
Sn/Cu/Fe	.0045"
Monel	.0045"
Aluminum	.005"
Sn/Phosphor Bronze	.0045"
Ag/Brass	.005"

Stockings are available in widths from .250" to 10.0"

Contact TECKNIT for price and availability.

ORDERING INFORMATION

For 25 and 100 ft. [7.6 and 30.5 m] lengths, EMC SHIELDING TAPE is supplied in individual packages. Longer continuous lengths are supplied on spools. To order standard parts, specify the TECKNIT Part Number and the quantity or rolls or feet. For non-standard items contact your nearest TECKNIT area representative or factory location.